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EXAMINER

REILLY, SEAN M

ART UNIT PAPER NUMBER

2153

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,147

Applicant(s)

JANNIELLO ET AL.

Examiner

Sean Reilly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/22/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - The specification cross references an application filed August 14, 2001, entitled "Method and Apparatus for Broadcast Delivery of Content to a Client-Side Cache Based on User Preferences," on pages 1, 2, and 5 (paragraphs 1, 2, and 2 respectively). The serial number for this application must be provided for each instance it is referenced. Appropriate correction is required.
 - Figure 5 is referenced in the disclosure however figure 5 is not present in the drawings submitted on 12/04/2001. Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(u)(1) because view reference "FIG. 4" is used to designate multiple views. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13 and 15-23 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Carter et al. (U.S. Patent Number 6,026,474), hereinafter referred to as Carter.
4. In considering claim 1, Carter discloses a method for storing digital content in a client-side cache, said method comprising the steps of:
 - receiving content broadcast from a central server (see Col 27, lines 65-66);
 - storing said received content in said client-side cache (see Col28, lines 7-10);
 - and making said content in said client-side cache available to other clients (see Col 28, line 17-19).
5. In considering claims 2, Carter discloses the method of claim 1, further comprising the step of determining if requested content is in said client-side cache before requesting said content from a remote source (see Col 28, lines 21-27).
6. In considering claim 3, Carter discloses the method of claim 1, further comprising the step of requesting said content from an edge server if said requested content is not in said client-side cache. This is an inherent step in Carter's design. Carter discloses

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downloading content from a server into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

7. In considering claim 4, Carter discloses the method of claim 1, further comprising the step of requesting said content from a provider of said content if said requested content is not in said client-side cache. This is an inherent step in Carter's design. Carter discloses downloading content from a content provider into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

8. In considering claim 5, Carter discloses the method of claim 1, further comprising the step of requesting said content from another client cache if said requested content is not in said client-side cache (see Col 28, lines 30-34).

9. In considering claim 6, Carter discloses the method of claim 5, wherein said step of requesting said content from another client cache further comprises the step of accessing a directory to determine where said content is cached (see Col 7, lines 14-21).

10. In considering claim 7, Carter discloses the method of claim 1, further comprising the step of providing information to a central cache directory regarding content that is stored in said client-side cache (see Col 28, lines 22-23).

11. In considering claim 8, Carter discloses the method of claim 1, wherein said content in said client-side cache is made available to other clients using a point-to-point link (see Col 11, line 18).

12. In considering claim 9, Carter discloses a method for obtaining content over a network, said method comprising the steps of determining if requested content is in a

local cache; and requesting said content from a remote client cache if said requested content is not in said local cache (see Col 28, lines 27-34).

13. In considering claim 10, Carter discloses the method of claim 9, further comprising the step of requesting said content from a remote source if said requested content is not in said remote client cache. This is an inherent step in Carter's design. Carter discloses downloading content from a remote source into a cache (Col 27, line 65) and making the cached content available to other users in a global client cache (Col 28, line 19). The step of downloading content from a remote source only occurs when the requested content is not found in the cache.

14. In considering claim 11, Carter discloses the method of claim 9, further comprising the step of requesting said content from an edge server if said requested content is not in said remote client cache. This is an inherent step in Carter's design. Carter discloses downloading content from a server into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

15. In considering claim 12, Carter discloses the method of claim 9, further comprising the step of requesting said content from a provider of said content if said requested content is not in said remote client cache. A content provider is considered to be a remote source as referenced in claim 10, therefore claim 12 fails to further limit and is rejected on the same basis as claim 10.

16. In considering claim 13, Carter discloses the method of claim 9, wherein said step of requesting said content from a remote client cache further comprises the step of

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accessing a directory to determine where said content is cached (see Col 7, lines 14-20).

17. In considering claim 15, Carter discloses a method for sharing digital content among a plurality of users, said method comprising the steps of:

- storing content broadcast from a central server in a client-side cache of at least one client (see Col 27, line 65 and Col 28, lines 7-8);
- making said content in said client-side cache available to a plurality of additional clients (see Col 2, lines 38-43);
- and maintaining a directory of said content made available to a plurality of additional clients (see Col 7, lines 17-20).

18. In considering claim 16, Carter discloses the method of claim 15, wherein a user determines if requested content is in said directory before requesting said content from another remote source (see Col 5, lines 48-58).

19. In considering claim 17, the method of claim 15, wherein said content in said client-side cache is made available to other clients using a point-to-point link (see Col 11, line 18).

20. In considering claim 18, Carter discloses a system for storing digital content in a client-side cache, said system comprising:

- a memory that stores computer-readable code (see Fig 1, Component 34c); and
- a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c) :

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- receive content broadcast from a central server (see Col 27, line 65);
- store said received content in said client-side cache (see Col 28, lines 7-10);
- and make said content in said client-side cache available to other clients (see Col 28, lines 17-19).

21. In considering claim 19, Carter discloses a system for obtaining content over a network, said system comprising:

- a memory that stores computer-readable code (see Fig 1, Component 34c); and
- a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c) :
 - determine if requested content is in a local cache (see Col 28, lines 23-34); and
 - request said content from a remote client cache if said requested content is not in said local cache (see Col 28, lines 23-34).

22. In considering claim 20, Carter discloses a system for sharing digital content among a plurality of users, said system comprising:

- a memory that stores computer-readable code (see Fig 1, Component 34c); and
- a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c) :
 - store content broadcast from a central server in a client-side cache of at least one client (see Col 28, lines 7-10);

- make said content in said client-side cache available to a plurality of additional clients (see Col 28, lines 17-19);
- and maintain a directory of said content made available to a plurality of additional clients (see Col 7, lines 17-20).

23. In considering claim 21, claim 21 contains no further limitations over claim 18, and is therefore rejected on the same basis as claim 18.

24. In considering claim 22, claim 22 contains no further limitations over claim 19, and is therefore rejected on the same basis as claim 19.

25. In considering claim 23, claim 23 contains no further limitations over claim 20, and is therefore rejected on the same basis as claim 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carter in view of Humphrey (U.S. Patent Application Number 09/267658).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content on a user requested basis from a given server (see Col 17,

line 65 and Col 28, line 7-8). However, Carter fails to teach remote client caches obtaining content over a broadcast connection. Nonetheless, the feature of obtaining content for a cache over a broadcast connection is well known, as evidenced by Humphrey.


In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 703-308-8646. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SR


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